REMARKS

INTRODUCTION:

In accordance with the foregoing, claims 4, 8, 12, and 16 have been canceled without prejudice or disclaimer, and claims 1, 6, 10, 14 and 18 have been amended. No new matter is being presented, and approval and entry are respectfully requested.

Claims 1-2, 5-7, 9-11, 13-15, and 17-18 are pending and under consideration. Reconsideration is respectfully requested.

IN THE SPECIFICATION:

A typographical error has been noted in paragraph [0025]. An extraneous "of" has been canceled in the first sentence of said paragraph. No new matter has been added.

REJECTION UNDER 35 U.S.C. §103:

A. In the Office Action, at pages 2-5, numbered paragraph 1, claims 1, 2, 4-13 and 18 were rejected under 35 U.S.C. §103(a) as being unpatentable over Takahashi et al. (USPN 6,741,534; hereafter, Takahashi) in view of Okumura (USPN 5,444,687; hereafter, Okumura). The reasons for the rejection are set forth in the Office Action and therefore not repeated. The rejection is traversed and reconsideration is requested.

Independent claim 1 has been amended to include the features of claim 4 for clarity. Claim 4 has been canceled without prejudice or disclaimer.

Independent claim 6 has been amended to include the features of claim 8 for clarity. Claim 8 has been canceled without prejudice or disclaimer.

Independent claim 10 has been amended to include the features of claim 12 for clarity. Claim 12 has been canceled without prejudice or disclaimer.

Independent claim 18 has been amended to include the features of claim 4 for clarity.

The Examiner admits that Takahashi does not teach claims 1 or 6 of the present invention wherein ATIP information is used. In fact, nowhere in Takahashi is the terminology "ATIP" recited. Hence, Takahashi does not teach or suggest the use of "ATIP" as is utilized in independent claims 1, 6, 10, and/or 18 of the present invention.

It is respectfully submitted that there may be a misunderstanding of the terminology. A "wobble signal," as is disclosed in Okumura, is the usually sinusoidal deviation of the pre-groove track on formats such as CD-R, CD-RW, DVD-R, Minidisk, and the like. The pre-groove is not a perfect Archimedes Spiral, but rather is "wobbled" in a sinusoidal fashion. The player detects this wobble from the unrecorded disc and uses it to lock precisely onto the pre-groove track.

The amplitude of the wobble is generally very small compared to the track pitch (e.g., about 30 nanometers) and can be a fixed frequency) (e.g., for DVD-R) or modulated (e.g., CD-R).

The pre-groove is a pre-mastered continuous spiral groove which the player uses to lock onto the track. The recorded pits are then written either in or below the groove.

ATIP is Absolute Time In Pregroove, the addressing scheme for CD-R, CD-RW and MiniDisk. These formats employ a wobbled pre-groove wherein the wobble is digitally modulated with time code data and other disc information. The time code data is in minutes:seconds:frames format. The wobble signal is Frequency Shift Keyed with a carrier frequency of 22.05 Khz and a deviation of 1 Khz.

The spiral of optical discs is known in mathematical terms as an Archimedes Spiral, which is a spiral that increases in diameter linearly with increasing radius. The interval between turns of the spiral is called the track pitch, which is nominally constant for most optical disc formats (e.g., for DVD, it is fixed at 0.74 microns).

Thus, Okumura states, col. 9, lines 41-53, recited below for the Examiner's convenience:

In the above-described embodiment, the frequency of the write clock is determined on the basis of the position of the record/reproduction head 43 in the radial direction. Alternatively, the record position may be obtained on the basis of <u>a wobble signal previously embedded in the guide groove of a track on the optical disc 41 or position information called "absolute time in groove" (ATIP) which is a modulated and recorded wobble signal and the write clock may be generated on the basis of this write clock. In the case of a CD-MO generally, a clock signal can be obtained from a wobble signal during recording. This wobble signal is recorded by the CLV system. (emphasis added)</u>

Okumura utilizes the wobble signal per se to synchronize a write clock wobble signal to make the clock frequency proportional to a record position in the radial direction automatically (col. 10, lines 4-6, Okumura). Okumura does not teach or suggest using ATIP, i.e., the digitally modulated wobble signal with time code data and other disc information to determine a current position of a pickup by a location determination unit that compares the number of counted ATIP syncs with the reference number of ATIP syncs and determines the current position of the pickup based on the comparison result, wherein the location determination unit determines that the pickup is present in a lead-in area when the number of counted ATIP syncs is less than the reference number of ATIP syncs, as is recited in amended claim 1 of the present invention, and similarly in amended independent claims 6, 10, and 18 of the present invention.

Hence, it is respectfully submitted that the combination of Takahashi and Okumura does not teach or suggest independent claims 1, 6, 10, and 18 of the present invention.

Thus, it is respectfully submitted that amended independent claims 1, 6, 10 and 18 of the present invention are patentable under 35 U.S.C. §103(a) over Takahashi et al. (USPN 6,741,534) in view of Okumura (USPN 5,444,687), alone or in combination. Since claims 2, 5, 7, 9, 11, and 13 depend from amended independent claims 1, 6, and 10, respectively, claims 2,

5, 7, 9, 11, and 13 are submitted to be patentable under 35 U.S.C. §103(a) over Takahashi et al. (USPN 6,741,534) in view of Okumura (USPN 5,444,687), alone or in combination for at least the reasons amended independent claims 1, 6 and 10 are patentable under 35 U.S.C. §103(a) over Takahashi et al. (USPN 6,741,534) in view of Okumura (USPN 5,444,687), alone or in combination.

B. In the Office Action, at pages 4-5, claims 14-17 were rejected under 35 U.S.C. §103(a) as being unpatentable over Takahashi et al. (USPN 6,741,534; hereafter, Takahashi) and Okumura (USPN 5,444,687; hereafter, Okumura) in view of Park (USPN 6,466,535; hereafter, Park).

Independent claim 14 has been amended to include the features of claim 16 for clarity. Claim 16 has been canceled without prejudice or disclaimer.

As recited above, Takahashi does not teach or suggest the use of "ATIP" as is utilized in amended independent claim 14 of the present invention. Hence, Takahashi does not teach or suggest amended independent claim 14 of the present invention, wherein during determining of the current position of the pickup, the pickup is determined to be present in a lead-in area when the counted number of ATIP syncs is less than the reference number of ATIP syncs.

As recited above, Okumura teaches utilizing a wobble signal per se, but does not teach or suggest using ATIP, i.e., the digitally modulated wobble signal with time code data and other disc information for determining a current position of the pickup based on the comparison result ... wherein during determining of the current position of the pickup, the pickup is determined to be present in a lead-in area when the counted number of ATIP syncs is less than the reference number of ATIP syncs, as is recited in amended claim 14 of the present invention.

Nowhere in Park is ATIP mentioned. Hence, Park does not teach or suggest determining a current position of the pickup based on the comparison result ... wherein during determining of the current position of the pickup, the pickup is determined to be present in a lead-in area when the counted number of ATIP syncs is less than the reference number of ATIP syncs, as is recited in amended claim 14 of the present invention.

Thus, it is respectfully submitted that amended claim 14 is patentable under 35 U.S.C. §103(a) over Takahashi et al. (USPN 6,741,534) and Okumura (USPN 5,444,687) in view of Park (USPN 6,466,535), alone or in combination. Since claims 15 and 17 depend from amended independent claim 14, claims 15 and 17 are patentable under 35 U.S.C. §103(a) over Takahashi et al. (USPN 6,741,534) and Okumura (USPN 5,444,687) in view of Park (USPN 6,466,535), alone or in combination, for at least the reasons amended independent claim 14 is

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patentable under 35 U.S.C. §103(a) over Takahashi et al. (USPN 6,741,534) and Okumura (USPN 5,444,687) in view of Park (USPN 6,466,535), alone or in combination.

EXAMINER'S RESPONSE TO ARGUMENTS:

In the Office Action, at pages 5-6, numbered paragraph 2, the Examiner responded to Applicants' argument filed November 1, 2006.

In view of the above amendments and arguments, the Examiner's concerns are respectfully submitted to be overcome.

CONCLUSION:

In accordance with the foregoing, it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot, and further, that all pending claims patentably distinguish over the prior art. Thus, there being no further outstanding objections or rejections, the application is submitted as being in condition for allowance which action is earnestly solicited.

If the Examiner has any remaining issues to be addressed, it is believed that prosecution can be expedited by the Examiner contacting the undersigned attorney for a telephone interview to discuss resolution of such issues.

If there are any underpayments or overpayments of fees associated with the filing of this Amendment, please charge and/or credit the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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